

<b>FTIP ID#</b> <i>(required)</i> ORA052				
<b>TCWG Consideration Date</b> October 23, 2012				
<b>Project Description</b> <i>(clearly describe project)</i> The U.S. Federal Highway Administration (FHWA), in cooperation with the Foothill/Eastern Transportation Corridor Agency (F/ETCA), proposes to construct an approximately 5.5-mile long extension of the existing State Route 241 (SR-241) from its current terminus at Oso Parkway to Cow Camp Road (ORA082401) immediately north of State Route 74 (SR-74) in Orange County (County).				
<b>Type of Project</b> <i>(use Table 1 on instruction sheet)</i> Extension of an existing State highway				
<b>County</b> Orange	<b>Narrative Location/Route &amp; Postmiles</b> SR-241 PM 9.8/14.6  <b>Caltrans Projects – EA#</b> 11102			
<b>Lead Agency:</b> Transportation Corridor Agencies				
<b>Contact Person</b> Valarie McFall	<b>Phone#</b> (949) 754-3475	<b>Fax#</b> (949) 754-3491	<b>Email</b> vmcfall@thetollroads.com	
<b>Hot Spot Pollutant of Concern</b> <i>(check one or both)</i> <b>PM2.5</b> X <b>PM10</b> X				
<b>Federal Action for which Project-Level PM Conformity is Needed</b> <i>(check appropriate box)</i>				
<b>Categorical Exclusion (NEPA)</b>	X <b>EA or Draft EIS</b>	<b>FONSI or Final EIS</b>	<b>PS&amp;E or Construction</b>	<b>Other</b>
<b>Scheduled Date of Federal Action:</b> 2013				
<b>NEPA Delegation – Project Type</b> <i>(check appropriate box)</i>				
<b>Exempt</b>	<b>Section 6004 – Categorical Exemption</b>	X	<b>Section 6005 – Non-Categorical Exemption</b>	
<b>Current Programming Dates</b> <i>(as appropriate)</i>				
	<b>PE/Environmental</b>	<b>ENG</b>	<b>ROW</b>	<b>CON</b>
<b>Start</b>	10/2011	10/2011	8/2012	3/2013
<b>End</b>	1/2013	3/2013	1/2013	12/2013

**Project Purpose and Need (Summary):** *(attach additional sheets as necessary)*

**Purpose.** The purpose of the proposed project is to provide a transportation facility that will reduce existing and forecast deficiencies and congestion on Interstate 5 (I-5) and the arterial network in South Orange County. The proposed project will enhance accessibility to the regional transportation system for local (existing and future with The Rancho Mission Viejo [RMV] Ranch Plan development [Ranch Plan]) as well as intra- and inter-regional trips. Between South Orange County and Northern Orange County or Riverside County, commuters will be able to begin or extend their trip on the SR-241 an additional 5.5 miles, avoiding congested conditions on I-5 and reducing congestion, including during peak hours, on the I-5 and arterials connecting to the I-5.

The purpose of the proposed project is also to implement a major component of the County of Orange Master Plan of Arterial Highways (MPAH) and the Transportation Element of the County of Orange General Plan. The proposed project will reduce an existing gap in the Orange County arterial highway system, providing an alternative to I-5.

**Need.** The need for the proposed project is illustrated by the existing congested and over-capacity conditions on I-5 and arterials that cross I-5 in South Orange County. Specifically, the 2035 peak hour intersection analysis shows a number of intersections in the study area that will operate at more efficient levels of service, with less traffic when the proposed project is complete. By initiating the Project at this time, the traffic benefits would begin in 2013, providing an alternative to I-5, reducing congestion and improving emergency access and evacuation without using any public funds. The need for the proposed project is further demonstrated by the existing development patterns and the approved Ranch Plan development, presently under construction. Increases in projected traffic demand between now and 2035, the long-range forecast year, are based on adopted plans and forecasts of the Southern California Association of Governments for this region.

**Surrounding Land Use/Traffic Generators** *(especially effect on diesel traffic)*

Land uses surrounding and adjacent to the project alignment include mostly vacant properties, residential uses, Tesoro High School, and agricultural uses.

**Opening Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility SR-241**

2015 No Build – No roadway

2015 Build, ADT = 13,000, Truck ADT = 390 (3%), LOS A

Note: 2015 represents the first full year of operation following opening at the end of 2013

**RTP Horizon Year / Design Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility SR-241**

2035 No Build – No roadway

2035 Build, ADT = 31,000, Truck ADT = 930 (3%), LOS A

**Opening Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT**

Cow Camp Road

2015 No Build, ADT = 34,000, Truck ADT = 1,020 (3%), LOS C

2015 Build, ADT = 35,000, Truck ADT = 1,050 (3%), LOS C

Note: 2015 represents the first full year of operation following opening at the end of 2013

**RTP Horizon Year / Design Year: If facility is an interchange (s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT**

Cow Camp Road

2035 No Build, ADT = 68,000, Truck ADT = 2,040 (3%), LOS F

2035 Build, ADT = 58,000, Truck ADT = 1,740 (3%), LOS E

**Describe potential traffic redistribution effects of congestion relief** *(impact on other facilities)*

See attached analysis

**Comments/Explanation/Details** *(attach additional sheets as necessary)*

See attached analysis

### **PM<sub>2.5</sub>/PM<sub>10</sub> Hot-Spot Analysis**

The proposed project is located within a nonattainment area for federal particulate matter less than 2.5 microns in diameter (PM<sub>2.5</sub>) and particulate matter less than 10 microns in diameter (PM<sub>10</sub>) standards. Therefore, per 40 CFR Part 93, hot-spot analyses are required for conformity purposes. However, the United States Environmental Protection Agency (EPA) does not require hot-spot analyses, qualitative or quantitative, for projects that are not listed in Section 93.123(b)(1) as an air quality concern. The project does not qualify as a project of air quality concern (POAQC) because of the following reasons:

- i. As the proposed project would extend SR-241, it is a new highway project. However, based on the Traffic Study (Stantec, August 2012), the traffic volumes in the project area would not exceed the 125,000 average daily trips or 10,000 average daily truck trip thresholds for a POAQC. The 2015 and 2035 traffic volumes are shown in Tables A and B, respectively. In addition, as the project is located within a residential/open space area, the truck traffic percentage would not exceed the eight percent threshold for POAQC.
- ii. The proposed project does not affect intersections that are at LOS D, E, or F with a significant number of diesel vehicles. Based on the Traffic Analysis, the proposed project would reduce the delay and improve the LOS at intersections within the project vicinity. No intersection that is or would be operating at a LOS of D, E, or F would be affected by a significant number of diesel vehicles. The LOS conditions in the project vicinity with and without the proposed project are shown in Tables C, D, E, and F.
- iii. The proposed project does not include the construction of a new bus or rail terminal.
- iv. The proposed project does not expand an existing bus or rail terminal.
- v. The proposed project is not in or affecting locations, areas, or categories of sites that are identified in the PM<sub>2.5</sub> and PM<sub>10</sub> applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation.

Therefore, the proposed project meets the Clean Air Act requirements and 40 CFR 93.116 without any explicit hot-spot analysis. The proposed project would not create a new, or worsen an existing, PM<sub>10</sub> or PM<sub>2.5</sub> violation.

**Table A: 2015 Traffic Volumes**

Roadway Link	No Build		Build	
	ADT	Truck ADT	ADT	Truck ADT
SR-241 north of Oso Parkway	12,000	360	19,000	570
SR-241 south of Oso Parkway (project)	0	0	13,000	390
Oso Parkway west of SR-241	31,500	945	27,000	810
Antonio Parkway between Oso Parkway and Crown Valley Parkway	47,000	1,410	39,000	1,170
Antonio Parkway between Crown Valley Parkway and Cow Camp Road	44,000	1,320	36,500	1,095
Antonio Parkway between Cow Camp Road and Ortega Highway	35,000	1,050	37,000	1,110
Ortega Highway west of Antonio Parkway	38,000	4,560	38,000	4,560
Ortega Highway east of Antonio Parkway	17,000	1,190	17,000	1,190
La Pata south of Ortega Highway	23,000	1,610	24,000	1,680
Cow Camp Road	34,000	1,020	35,000	1,050

Source: Stantec (August 2012).

**Table B: 2035 Traffic Volumes**

Roadway Link	No Build		Build	
	ADT	Truck ADT	ADT	Truck ADT
SR-241 north of Oso Parkway	15,000	450	32,000	960
SR-241 south of Oso Parkway (project)	0	0	31,000	930
Oso Parkway west of SR-241	34,500	1,035	32,500	975
Antonio Parkway between Oso Parkway and Crown Valley Parkway	41,000	1,230	29,000	870
Antonio Parkway between Crown Valley Parkway and Cow Camp Road	54,500	1,635	37,500	1,125
Antonio Parkway between Cow Camp Road and Ortega Highway	39,000	1,170	42,000	1,260
Ortega Highway west of Antonio Parkway	43,500	5,220	42,000	5,040
Ortega Highway east of Antonio Parkway	13,000	910	11,000	770
La Pata south of Ortega Highway	39,000	2,730	42,000	2,940
Cow Camp Road	68,000	2,040	58,000	1,740

Source: Stantec (August 2012).

**Table C: 2015 No Build Intersection Level of Service**

Intersection		A.M. Peak Hour		P.M. Peak Hour	
		ICU	LOS	ICU	LOS
18	Marguerite Parkway & Oso Parkway	0.74	C	0.67	B
19	Felipe Road & Oso Parkway	0.76	C	0.75	C
20	Antonio Parkway & Antonio Parkway	0.93	E	0.89	D
21	Marguerite Parkway & Felipe Road	0.62	B	0.59	A
30	Marguerite Parkway & Crown Valley Parkway	0.58	A	0.74	C
31	Antonio Parkway & Crown Valley Parkway	0.88	D	0.82	D
44	Rancho Viejo Road & Ortega Highway	0.66	B	0.71	C
45	La Novia Avenue & Ortega Highway	0.66	B	0.63	B
46	Antonio Parkway & Ortega Highway	0.82	D	0.85	D
50	Valle Road & San Juan Creek Road	0.64	B	0.76	C
51	La Novia Avenue & San Juan Creek Road	0.50	A	0.42	A
59	La Pata Avenue & Camino Del Rio	0.59	A	0.60	A
74	Antonio Parkway & Cow Camp Road	0.72	C	0.70	B
115	Valle Road & La Novia Avenue	0.50	A	0.57	A
156	SR-241 SB Ramps & Antonio Parkway	0.43	A	0.39	A
157	SR-241 NB Ramps & Antonio Parkway	0.73	C	0.39	A

Source: Stantec (August 2012).

ICU = intersection capacity utilization

LOS = level of service

NB = northbound

SB = southbound

SR-241 = State Route 241

**Table D: 2015 Build Intersection Level of Service**

Intersection		A.M. Peak Hour		P.M. Peak Hour	
		ICU	LOS	ICU	LOS
18	Marguerite Parkway & Oso Parkway	0.75	C	0.68	B
19	Felipe Road & Oso Parkway	0.76	C	0.79	C
20	Antonio Parkway & Antonio Parkway	0.83	D	0.79	C
21	Marguerite Parkway & Felipe Road	0.60	A	0.60	A
30	Marguerite Parkway & Crown Valley Parkway	0.55	A	0.74	C
31	Antonio Parkway & Crown Valley Parkway	0.76	C	0.77	C
44	Rancho Viejo Road & Ortega Highway	0.65	B	0.71	C
45	La Novia Avenue & Ortega Highway	0.66	B	0.63	B
46	Antonio Parkway & Ortega Highway	0.80	C	0.88	D
50	Valle Road & San Juan Creek Road	0.63	B	0.77	C
51	La Novia Avenue & San Juan Creek Road	0.49	A	0.43	A
59	La Pata Avenue & Camino Del Rio	0.60	A	0.66	B
74	Antonio Parkway & Cow Camp Road	0.61	B	0.72	C
115	Valle Road & La Novia Avenue	0.51	A	0.58	A
156	SR-241 SB Ramps & Antonio Parkway	0.34	A	0.39	A
157	SR-241 NB Ramps & Antonio Parkway	0.59	A	0.31	A

Source: Stantec (August 2012).

ICU = intersection capacity utilization

LOS = level of service

NB = northbound

SB = southbound

SR-241 = State Route 241

**Table E: 2035 No Build Intersection Level of Service**

Intersection		A.M. Peak Hour		P.M. Peak Hour	
		ICU	LOS	ICU	LOS
18	Marguerite Parkway & Oso Parkway	0.83	D	0.67	B
19	Felipe Road & Oso Parkway	0.70	B	0.76	C
20	Antonio Parkway & Antonio Parkway	0.84	D	0.87	D
21	Marguerite Parkway & Felipe Road	0.64	B	0.71	C
30	Marguerite Parkway & Crown Valley Parkway	0.72	C	0.89	D
31	Antonio Parkway & Crown Valley Parkway	0.77	C	0.72	C
44	Rancho Viejo Road & Ortega Highway	0.76	C	0.94	E
45	La Novia Avenue & Ortega Highway	0.83	D	0.81	D
46	Antonio Parkway & Ortega Highway	0.96	E	0.69	B
50	Valle Road & San Juan Creek Road	0.67	B	0.72	C
51	La Novia Avenue & San Juan Creek Road	0.54	A	0.55	A
59	La Pata Avenue & Camino Del Rio	0.76	C	0.77	C
74	Antonio Parkway & Cow Camp Road	1.04	F	1.10	F
115	Valle Road & La Novia Avenue	0.69	B	0.76	C
156	SR-241 SB Ramps & Antonio Parkway	0.46	A	0.47	A
157	SR-241 NB Ramps & Antonio Parkway	0.91	E	0.45	A

Source: Stantec (August 2012).

ICU = intersection capacity utilization

LOS = level of service

NB = northbound

SB = southbound

SR-241 = State Route 241



**Table F: 2035 Build Intersection Level of Service**

Intersection		A.M. Peak Hour		P.M. Peak Hour	
		ICU	LOS	ICU	LOS
18	Marguerite Parkway & Oso Parkway	0.83	D	0.67	B
19	Felipe Road & Oso Parkway	0.69	B	0.70	B
20	Antonio Parkway & Antonio Parkway	0.61	B	0.64	B
21	Marguerite Parkway & Felipe Road	0.61	B	0.63	B
30	Marguerite Parkway & Crown Valley Parkway	0.68	B	0.86	D
31	Antonio Parkway & Crown Valley Parkway	0.53	A	0.57	A
44	Rancho Viejo Road & Ortega Highway	0.72	C	0.88	D
45	La Novia Avenue & Ortega Highway	0.75	C	0.74	C
46	Antonio Parkway & Ortega Highway	0.98	E	0.69	B
50	Valle Road & San Juan Creek Road	0.66	B	0.70	B
51	La Novia Avenue & San Juan Creek Road	0.57	A	0.54	A
59	La Pata Avenue & Camino Del Rio	0.81	D	0.88	D
74	Antonio Parkway & Cow Camp Road	0.77	C	0.93	E
115	Valle Road & La Novia Avenue	0.69	B	0.75	C
156	SR-241 SB Ramps & Antonio Parkway	0.50	A	0.73	C
157	SR-241 NB Ramps & Antonio Parkway	0.52	A	0.51	A

Source: Stantec (August 2012).

ICU = intersection capacity utilization

LOS = level of service

NB = northbound

SB = southbound

SR-241 = State Route 241